

# Central Valley Dairy Representative Monitoring Program

*For the benefit of dairy producers and water quality across our valley*

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April 1, 2014

To: Clay L. Rodgers, Assistant Executive Officer  
Central Valley Regional Water Quality Control Board

From: J.P. Cativiela, Program Administrator  
Central Valley Dairy Representative Monitoring Program (CVDRMP)

Re: Submittal of CVDRMP's second annual report

Dear Mr. Rodgers:

On behalf of the CVDRMP Board of Directors and to comply with the requirements of the Monitoring and Reporting Program (as revised October 3, 2013) for General Order R5-2013-0122, CVDRMP hereby submits its Annual Representative Monitoring Report (ARMR) for 2013.

This annual report was prepared by CVDRMP's duly authorized Technical Program Manager, Luhdorff & Scalmanini Consulting Engineers (LSCE). We thank them for their excellent technical work to date, as represented in their report. We also acknowledge the nearly 1,200 Central Valley dairy families who continue to provide the organizational and financial support necessary to launch and manage this effort. This report has been presented to and reviewed by our Board, which has now approved its submittal to your agency.

We are pleased to report that as our monitoring network grew to 436 wells on 42 dairies in 2013, the monitoring program continued to perform as designed. As you know, this program is currently the largest of its kind in California, and to our knowledge, anywhere in the United States. We are progressing according to schedule toward developing an information base to assess compliance and to improve management practices where needed. This cost-effective program allows for efficient data collection and analysis without placing additional, unnecessary economic burdens on dairies that have struggled economically in recent years.

Initial data collected from the expanded network confirm that first-encountered groundwater beneath dairy facilities is affected by historic and/or current dairy farming practices, and suggests that application of fertilizer to crops plays a major role. This provides preliminary confirmation of previous work by the University of California, while building a strong foundation to expand on that previous knowledge and to develop strategies for improvement.

Importantly, the design of the dedicated monitoring wells in this program is fundamentally different from that of drinking water wells. Data from the monitoring wells are therefore not indicative of actual impacts to drinking water. Constituent concentrations in groundwater alone are not a valid indicator of effective versus non-effective management practices. Because of this, it remains our goal to refine our understanding of the relationship between monitoring data and farming practices, and to develop strategies for improving efficiency of fertilizer

management. This is broadly recognized as an important long-term goal for all of agriculture.

As you know, the scope of this program goes beyond well monitoring. CVDRMP has met the important objective of installing, collecting and assessing data from a representative network of wells. As this data collection and analysis continues, equally important work has commenced toward developing and validating improved managed practices for Central Valley dairies. This year CVDRMP will launch additional field studies focused on improved pond management, irrigation and fertilizer application techniques. Through these studies, our program will focus on identifying effective, practical and feasible improvements that can be implemented by dairy farmers as they continue their ongoing efforts to protect and improve water quality. Throughout the process, we will continue to convene expert panels to guide our work.

In short, the program continues its progress and leadership in developing strategies to protect and enhance water quality. Much work remains ahead, yet our Board is confident that we remain on course to provide valuable information, insight and a roadmap for improvement as this multi-year effort proceeds.